

CAPACITY BUILDING IN BIOSAFETY OF GM CROPS IN ASIA

PRESENT STATUS

**Country:** .....

**Name and address  
of person responding:** .....

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**E-mail:** .....

**Telephone:** .....

**Fax:** .....

**QUESTIONNAIRE**

**(Please put 'X' in box, which is applicable)**

1. What is the priority ranking of biotechnology?

High

Medium

Low

2. Is there a National Policy on biotechnology?

Yes

No

3. What are the areas covered by biotechnology projects? (Please put 'X' in the second column against the areas(s) covered by biotech related projects).

Areas of Biotechnological Research	Please mark 'X'
1. Disease diagnosis a. Human disease b. Animal diseases c. Fish diseases d. Plant diseases	
2. Detection of mycotoxins	
3. Bio-control a. Pests of plants b. Pests of animals c. Diseases of plants d. Diseases of animals	
4. Bio-fertilizers	
5. Tissue culture a. Anther culture b. Somaclonal variants c. Embyo rescue	
6. Micro-propagation	
a. Tuber crops (potato) b. Fruit crops (banana) c. Forests trees	
7. Embryo transfer technology	
8. Vaccine production	
9. Enzymes, hormones and antibiotics production	
10. Conservation of genetic resources a. Animals (wild and domesticated) b. Plants (forest trees; food plants; industrial plants) c. Fish (marine and fresh water)	

d. Microbes (algae; fungi; bacteria, viruses)	
11. Molecular characterization and finger printing of genetic resources	
a. Animals	
b. Fish	
c. Plants	
d. Microbes	
12. Molecular characterization of pests and pathogens	
a. Animal	
b. Fish	
c. Plants	
13. Identification of useful genes	
a. Gene cloning	
14. Marker assisted selection/breeding	
a. Crop plants	
b. Animals	
c. Fish	
15. Genetic transformation	
a. Animals	
b. Fish	
c. Plants	
d. Microbes	
16. Molecular 'pharming'	
17. Development of recombinant vaccines	
18. Developing drug delivery systems	
19. Gene therapy	
20. Cloning of animals	
21. Field Testing	

4. Budget for biotechnology projects and other related activities

- a. Approximate amount in US \$ .....
- b. Percentage of GDP .....
- c. Percentage of funds for scientific research .....

5. Name the Ministries/Departments dealing with biotechnology related activities.

- a. ....  
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- b. ....  
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- c. ....  
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- d. ....  
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6. Name the Institutions engaged in biotech research and other related activities

S No.	Institute (Indicate whether Govt. Pvt. or NGO)	How do you rate their infrastructure? (adequate/inadequate)	Whether biosafety committee in position*	Number of Scientists engaged in biotech research			Areas of Biotech research
				Ph. D from your country	Ph. D. from other contry	M. Sc	

\* Please mark 'X' where applicable

7. Is your country a signatory to the following Conventions, Treaties and Protocols?

- |  |                          |                          |
|--|--------------------------|--------------------------|
| a. Convention on Biodiversity (1992)   | <input type="checkbox"/> | <input type="checkbox"/> |
|  | Yes                      | No                       |
| b. Cartagena Protocol on Biosafety (2000)  | <input type="checkbox"/> | <input type="checkbox"/> |
|  | Yes                      | No                       |
| c. International Treaty on Plant Genetic Resources for Food and Agriculture (2001) | <input type="checkbox"/> | <input type="checkbox"/> |
|  | Yes                      | No                       |
| d. Trade Related Aspects of Intellectual Property Rights (1995)                    | <input type="checkbox"/> | <input type="checkbox"/> |
|  | Yes                      | No                       |

8. Has your country established a Biosafety Clearing House to facilitate exchange of information on GMOs

<input type="checkbox"/>	<input type="checkbox"/>
Yes	No

9. What is the Institutional Mechanism for Biosafety in your country?

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10. Has your country established a National Biosafety Committee? If yes, what are its functions?

<input type="checkbox"/>	<input type="checkbox"/>
Yes	No

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11. What is the mechanism of import of GMOs in your country?

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12. What is the mechanism of field evaluation and monitoring of GMOs?

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13. Is there a policy in your country for introduction of GMOs for direct use as food, feed or for processing?

Yes

No

a. If yes, please describe the policy in brief.

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14. Is there a Biosafety Act in your country?

Yes

No

(a) If yes, when was it enacted (year)? .....

(b) If not, is it proposed to be enacted?

Yes

No

15. Which is the National Authority dealing with Biosafety in your country?

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16. What is the mechanism of documentation and building of database for GMOs?

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17. Is your country a signatory of Sanitary and Phytosanitary (SPS) Agreement of WTO?

Yes

No

(a) If yes, is the expertise available for its implementation in relation to GMOs?

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18. Is your National Plant Protection Organization adequately equipped to check inadvertent introduction of GMOs and hazardous organisms.

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19. What is the mechanism of public deliberations for considering their views on biosafety related issues?

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20. What are the existing 'Patent Laws in relation to biotechnological interventions and use of biotech products?

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21. What is the status of 'Plant Variety Protection'?

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22. Is there a documentation of genera and species for which protection is required?

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23. Is there a documentation of 'Hazardous' organisms?

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24. What is the legal framework for trademark protection?

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25. Is there legislation on Intellectual Property Rights?

Yes

No

26. Is there a Biodiversity and Community Knowledge Protections Act?

Yes

No

27. What are the regulatory measures governing seeds of plants?

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28. What are the rules governing food safety?

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29. In your opinion, what are the requirements of Capacity Building in Biosafety of GM Crops in your country?

a. Human resource

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b. Infrastructure for research

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c. Infrastructure for Technology Development

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d. Regulatory mechanisms

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e. Policies for assessing and managing biosafety risks of GM crops

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f. Financial resources

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